



# SAIP2016

## Tuesday 05 July 2016

### Nuclear, Particle and Radiation Physics (1): Nuclear, Particle and Radiation Physics (1) - LT3 (10:00-10:40)

**-Conveners: Deepak Kar**

time	[id] title	presenter
10:00	[134] Jet measurements in LHC	Ms ROY, Debarati
10:20	[172] Jet substructure techniques for identifying boosted bosons in ATLAS	Ms MOODLEY, Chane Simone

### Nuclear, Particle and Radiation Physics (1): Nuclear, Particle and Radiation Physics (1) - 4A (11:10-12:10)

**-Conveners: Simon Connell**

time	[id] title	presenter
11:30	[260] Proton induced radiation damage to the fluorescence capability of plastic scintillators for the Tile Calorimeter of ATLAS	Ms JIVAN, Harshna
11:50	[419] Crystals Orientation Measurements of the iThemba LABS Segmented Clover Detector.	Ms MTHEMBU, Sinegugu Happiness

### Nuclear, Particle and Radiation Physics (1): NPRP - LT3 (11:10-12:10)

**-Conveners: Rob Bark**

time	[id] title	presenter
11:10	[95] Spectroscopy of the low-lying excitation region in $^{9}\text{B}$	Dr DANIEL JOSÉ, Marín-Lámbarri
11:30	[424] Coulomb excitation reorientation effect of the first $2^{+}$ state at 4.439 MeV in $^{12}\text{C}$	Dr MUKHI, Kumar Raju
11:50	[194] Searching for exotic shapes in silicon-28	Dr ADSLEY, Philip

### Nuclear, Particle and Radiation Physics (1): NPRP - LT3 (14:00-15:40)

**-Conveners: Simon Mullins**

time	[id] title	presenter
14:00	[355] Determining the spectroscopic quadrupole moment $Q_{\text{s}}$ of the first $2^{+}$ state in $^{40}\text{Ar}$	Mr MOKGOLOBOTHO, Makabata Jeremia
14:20	[92] Searching for the low-energy enhancement in $^{91}\text{Zr}$	Mr ZIKHALI, Bonginkosi Richard
14:40	[533] Division Meeting: NPRP	Dr MULLINS, Simon

# Wednesday 06 July 2016

## Nuclear, Particle and Radiation Physics (1): NPRP1 - LT3 (09:40-10:40)

**-Conveners: John Sharpey-Schafer**

time	[id] title	presenter
09:40	[170] Coupling of single proton configurations to collective core excitations in $^{162}\text{Yb}$ : the nucleus $^{161}\text{Tm}$	Ms JONGILE, SANDILE
10:00	[470] Coupling of single neutron and proton configurations to collective core excitations in $^{162}\text{Yb}$ .	Mr MDLETSHI, Linda
10:20	[210] Coupling of single neutron configurations to collective core excitations in $^{162}\text{Yb}$ , the nucleus $^{163}\text{Yb}$	Mr SANDILE, Jongile Mr MDLETSHI, Linda Mr SITHOLE, Makuhane

## Nuclear, Particle and Radiation Physics (1): NPRP1 - LT3 (11:10-12:10)

**-Conveners: Pete Jones**

time	[id] title	presenter
11:10	[345] Production of ion beams with ECR ion sources and the pre-acceleration with injector cyclotrons at iThemba LABS	Dr MIRA, Joele
11:30	[349] EXPERIMENTAL STUDY OF INNER SHELL IONIZATION IN AN ECRIS PLASMA	Mr SAKILDIEN, Muneer
11:50	[93] Change in the Angular Momentum Distribution due to Nuclear Plasma Interactions	Mr NOGWANYA, Thembaletu

## Nuclear, Particle and Radiation Physics (1): NPRP1 - LT3 (14:00-15:40)

**-Conveners: Paul Papka**

time	[id] title	presenter
14:00	[333] Upgrades to the iThemba LABS quasi mono-energetic neutron beam facility	Dr SMIT, Frederick David
14:20	[467] Radiation Shielding Calculation using FLUKA transport code for Radioactive-ion Beams Facility at iThemba LABS.	Mr MANTENGU, Nkanyiso R.
14:40	[311] Measurements of gamma-ray production cross sections of proton beam at energies of 80-125 MeV with calcium target.	Mr KUNYANA, AYANDA
15:00	[324] Measuring prompt gamma cross-section data for Carbon target using AFRODITE clover detectors	Ms RAMANATHAN, VIJITHA
15:20	[381] Cross Section Measurements for Neutron Induced Reactions on Bi Target using Quasi Mono-Energetic Neutron Beams of 90 and 140 MeV Energies.	Ms LAMULA, Thobeka

# Thursday 07 July 2016

## **Nuclear, Particle and Radiation Physics (1): NPRP - 4A (09:40-10:40)**

**-Conveners: Azwinndini Muronga**

time	[id] title	presenter
09:40	[417] CHPC WLCG Tier2 status, plans and user analysis.	MURRAY, Sean
10:00	[173] The search for crystal undulator radiation	Dr HENNING, Colleen
10:20	[413] CODE-RADE - Community Infrastructure for the Delivery of Physics Applications	MURRAY, Sean

## **Nuclear, Particle and Radiation Physics (1): Nuclear, Particle and Radiation Physics (1) - LT3 (09:40-10:40)**

**-Conveners: Ricky Smit**

time	[id] title	presenter
09:40	[4] Modelling of Radiological Risks from Gold Mine Tailings in Gauteng Province, South Africa	Mr KAMUNDA, Caspah
10:00	[160] Chemical contamination and radiological risk assessment of Richards Bay waters	Mr MASOK, Felix Bitrus
10:20	[463] Modelling and measurements of cosmic-ray related muon-fluxes in the Huguenot Tunnel near Paarl (Western Cape, South Africa)	Mr DAWAM, Robert Rangmou

## **Nuclear, Particle and Radiation Physics (1): NPRP - 4A (11:10-12:10)**

**-Conveners: Simon Mullins**

time	[id] title	presenter
11:10	[59] Test for traditional vibrational wisdom in 110,112Cd by two proton stripping	Mr MAQABUKA, Bongani
11:30	[223] Nuclear structure studies relevant to double beta decay of 136Xe	REBEIRO, Bernadette
11:50	[67] Resonances in odd-odd 182Ta	Mr BRITS, Christiaan

## **Nuclear, Particle and Radiation Physics (1): Nuclear, Particle and Radiation Physics (1) - LT3 (11:10-12:10)**

**-Conveners: Deepak Kar**

time	[id] title	presenter
11:10	[342] The Analysis of Zh in association with missing transverse momentum using the CxAOD Framework with the ATLAS detector	Mr MTHEMBU, Skhathisomusa
11:30	[331] Constraints on new hypothetical particles in the Higgs sector using LHC Run 1 and 2 data	Mr VON BUDDENBROCK, Stefan
11:50	[115] Phase-II Upgrade of the ATLAS Inner Detector	Mr HAMITY, Guillermo

# Friday 08 July 2016

## Nuclear, Particle and Radiation Physics (1): NPRP - LT3 (09:40-10:40)

-Conveners: Thomas Leadbeater

time	[id] title	presenter
09:40	[29] BAGEL: the HPGe clovers array at K600 spectrometer	Dr PELLEGRINI, Luna
10:00	[369] Fine structure of the Isovector Giant Dipole Resonance of neutron-rich calcium isotopes using the (p,p') reaction at zero-degrees	Dr USMAN, Iyabo
10:20	[388] Observation of K-splitting in the Isoscalar Giant Quadrupole Resonance within the neodymium isotope chain using high energy-resolution inelastic proton scattering	Prof. CARTER, John

## Nuclear, Particle and Radiation Physics (1): NPRP - LT3 (11:10-12:10)

-Conveners: Thifhelimbilu Daphney Bucher

time	[id] title	presenter
11:10	[344] Search for chirality in $^{192}\text{Ti}$	Dr NDAYISHIMYE, Joram
11:30	[356] Identification of chiral pairs in multiple chiral bands associated with the same nucleon configuration	Dr SHIRINDA, OBED
11:50	[370] The design and simulation of a new experimental set up for measuring short nuclear level lifetimes.	Mr SINGH, Bhivek

## Nuclear, Particle and Radiation Physics (1): NPRP - LT3 (14:00-15:40)

-Conveners: Azwinndini Muronga

time	[id] title	presenter
14:00	[163] First Run 2 Soft QCD Results from ATLAS	KAR, Deepak
14:20	[515] AdS/CFT predictions for momentum correlations of $b\bar{b}$ pairs in heavy ion collisions.	Mr HAMBROCK, Robert
14:40	[104] The search for the Dark Vector Boson via the Higgs Portal	Prof. CONNELL, Simon
15:00	[372] Implementation of the preamplifier response function for the iThemba LABS segmented clover detector	Dr BUCHER, Thifhelimbilu Daphney
15:20	[157] Tracking Electrons Produced by Compton Scatter within a Prompt Gamma Imaging Device	Dr PETERSON, Stephen